Estimates Related to Broadcast-Only TV Households and Sets, and DTV Households with Over-the-Air Digital Broadcast Reception Capabilities

David Gunzerath, Ph.D.
Vice President, Research and Information Group
National Association of Broadcasters
August 11, 2004

#### Overview

The information on the following pages is responsive to questions that were asked in the Public Notice issued on May 27, 2004 by the FCC Media Bureau seeking quantitative data on over-the-air broadcast television users.

The information herein represents a compilation and analysis of data that was collected in the Spring 2004 wave of the Knowledge Networks/SRI *Home Technology Monitor* survey. The National Association of Broadcasters, as a subscriber to this survey, requested that a series of questions be included in this survey on the specific subjects of Broadcast-Only TV Households, Digital Television Set Ownership, and Over-the-Air Digital Television Reception Capability, among other topics. Data on these technologies that was collected from this survey were applied to Nielsen Media Research's 2003-04 U.S. Television Household estimates to calculate some of the figures contained in this report.

The number of households that rely solely on over-the-air broadcasting ("over-the-air households") for their television service.

## **Broadcast-Only TV Households**

Total U.S. TV Households % of U.S. TV Households that are Broadcast-only

108,410,160 <sup>a</sup>

1. Broadcast-Onl	v TVHHs	20,489,520
ii Bioaacact Ciii	,	20,700,020

a) Source: Nielsen Media Research, U.S. Television Household Estimates, 2003-04.

b) Source: Knowledge Networks/SRI Home Technology Monitor Survey, Spring 2004.

The number of households that subscribe to an MVPD and have one or more television sets that rely on OTA broadcast service.

## MVPD Homes with One or More Broadcast-Only Set

Total U.S. TV Households	108,410,160 <sup>a</sup>
% of U.S. TV Households that subscribe	<u>81.1%</u> ⁵
to an MVPD service	

Total MVPD HHs with one or more OTA-only sets 87,920,640 20.8%

2. Total MVPD HHs with one or more OTA-only sets	18,287,493
--------------------------------------------------	------------

a) Source: Nielsen Media Research, U.S. Television Household Estimates, 2003-04.

b) Source: Knowledge Networks/SRI Home Technology Monitor Survey, Spring 2004.

The number of analog-only television sets in use by the households identified in Questions 1 and 2; and the number of DTV sets capable of OTA reception in these HHs.

Broadcast-Only TVHHs Mean no. of sets per Broadcast-only TVHH  Est. Total Sets in Broadcast-only Homes  MVPD TVHHs Mean no. of sets per MVPD TVHH  St. Sets in Broadcast-only Homes  87,920,640 2.75
Est. Total Sets in Broadcast-only Homes 45,076,944  MVPD TVHHs 87,920,640
Est. Total Sets in Broadcast-only Homes 45,076,944  MVPD TVHHs 87,920,640
MVPD TVHHs 87,920,640
- ,,-
- ,,-
Mean no. of sets per MVPD TVHH 2.75
5-4 T-4-1 O-4- in MVDD Harman
Est. Total Sets in MVPD Homes 241,781,760
Fot Total Cata in All Homes
Est. Total Sets in All Homes 286,858,704
Digital Television/OTA Digital Set Penetration
Total U.S. TV Households 108,410,160 a
% of U.S. TVHHs with Digital TV Set <u>5.9%</u> <sup>b</sup>
Est. Total U.S. DTV Sets * 6.396.199
Est. Total U.S. DTV Sets * 6,396,199 % of DTV HHs with Digital OTA reception capability 22.9%
22.3%
Est. Total U.S. DTV Sets capable of OTA reception * 1,464,730
% of OTA capable DTV HHs that are Broadcast-only HHs 12.1% b
Est. OTA capable DTV sets in Broadcast-only HHs * 177,232
% of OTA capable DTV HHs that have MVPD service 87.9%
Est. OTA capable DTV sets in MVPD HHs * 1,287,498
% of MVPD OTA capable DTV HHs with one or more
Broadcast-only sets in the home 29.3%
Est. OTA capable DTV sets in MVPD HHs with one 377,237
or more Broadcast-only sets in the home *
4. Est. Total OTA capable DTV sets in HHs that are 554,469
either Broadcast-only or are MVPD subs with one

<sup>\*</sup> Assumes one DTV set per DTV HH, an assumption consistent with the view that repeat purchasing in the early lifecycle stages of new consumer electronics is minimal. See eBrain Consumer Research, 2004 HDTV Research: Exploring Advertising Effectiveness, Debunking Consumer Confusion, p. 7.

or more Broadcast-only sets in the home \*

a) Source: Nielsen Media Research, U.S. Television Household Estimates, 2003-04.

b) Source: Knowledge Networks/SRI Home Technology Monitor Survey, Spring 2004.

Analog Sets in HHs with at Least One Broadcast-Only TV	
Est. Total Sets in Broadcast-only Homes	45,076,944
Est. Total U.S. DTV Sets *	6,396,199
% of DTV sets (OTA capable or not) in Broadcast-only HHs	4.9% b
Est. No. of DTV Sets in Broadcast-only Homes *	313,414
Est. No. of Analog-only Sets in Broadcast-only Homes *	44,763,530
Total MVPD HHs with one or more OTA-only sets	18,287,493
% of MVPD HHs w/one or more OTA-only sets and DTV set (OTA capable or not)	7.2% <sup>b</sup>
Est. No. of DTVs in MVPD HHs w/one or more OTA-only sets *	1,316,699
Total MVPD HHs with one or more OTA-only sets	18,287,493
Mean no. of sets per MVPD TVHH with one or more	3.40 b
Broadcast-only sets Est. Total Sets in MVPD Homes with at least one Broadcast-Only Set	62,177,476
Less: Est. No. of DTVs in MVPD HHs with at least one	1,316,699
Broadcast-only set *	
Est. No. of Analog-only Sets in Households that are MVPD subs with one or more Broadcast-only set in the home *	60,860,777
3. Est. No. of Analog-only Sets in Households that are either Broadcast-only or are MVPD subs with one or more Broadcast-only sets in the home *	105,624,307
-	
Analog OTA Sets in MVPD HHs with One or More OTA-only Sets  Mean No. of Broadcast-only sets in MVPD HHs	0.32 b
% of MVPD HHs with at least One OTA-only Set	20.8% b
Mean No. of OTA-only sets in MVPD HHs with at least	
One OTA-only set Total MVPD HHs with one or more OTA-only sets	1.53846 18,287,493
Est. No. of Analog OTA-only Sets in MVPD HHs with one or	10,201,433
more OTA-only sets **	28,134,576
Analog Sets in All HHs	
Est. Total Sets in All Homes	286,858,704
Less: Est. Total U.S. DTV Sets *	6,396,199

<sup>\*</sup> Assumes one DTV set per DTV HH, an assumption consistent with the view that repeat purchasing in the early lifecycle stages of new consumer electronics is minimal. See eBrain Consumer Research, 2004 HDTV Research: Exploring Advertising Effectiveness, Debunking Consumer Confusion, p. 7.

Est. Total Analog Sets in All Homes

280,462,505

<sup>\*\*</sup> Assumes one DTV set per DTV HH, and assumes that DTV set is connected to MVPD service.

a) Source: Nielsen Media Research, U.S. Television Household Estimates, 2003-04.

b) Source: Knowledge Networks/SRI Home Technology Monitor Survey, Spring 2004.

## Demographic Characteristics of "Over-the-Air" Households

HH Characteristic	% of Group that is OTA HH	Index* vs. Total
Total U.S. TVHHs	18.9	100
Race/Ethnicity:		
White	15.9	84
Black	23.0	122
Hispanic	27.7	147
Spanish Primary Language	43.2	229
Annual HH Income:		
<\$30,000	25.3	134
\$30-49,999	18.6	98
\$50,000+	9.5	50
\$75,000 <b>+</b>	9.0	48
High Education Level w/in HH:		
HS or less	22.5	119
Some College +	16.7	88
Age of Head of HH:		
18-34	20.3	107
35-49	19.0	101
50+	16.5	87

<sup>\*</sup> **Note:** The above table should be interpreted as follows: 18.9% of U.S. TVHHs are broadcast-only, while 25.3% of TVHHs with annual income below \$30,000 are broadcast-only. The index of 134 means the incidence of broadcast-only HHs among this group is 34 percent greater than it is with the general population. In contrast, the index of 48 among the \$75,000+ annual HH income group means the incidence of broadcast-only HHs among this group is 52 percent less (100 – 48) than it is among the general population.

 $Source: Knowledge\ Networks/SRI\ \textit{Home Technology Monitor Survey},\ Spring\ 2004.$ 

# Geographic Characteristics of "Over-the-Air" Households

County Size *	% of Total U.S. OTA HHs	% of Total U.S. HHs
"A" Counties	40.3%	35.7%
"B" Counties	28.0%	30.8%
"C" Counties	16.5%	17.2%
"D" Counties	<u>15.2%</u>	<u>16.3%</u>
Total	100	100

<sup>\*</sup> **Note**: County classifications are based on Census Household counts and metropolitan proximity. "A" counties are heavily populated, highly urbanized areas, while "D" counties are considered very rural.

Source: Knowledge Networks/SRI Home Technology Monitor Survey, Spring 2004.

U.S. Census Region	% of Total U.S. OTA HHs	% of Total U.S. HHs
Northeast	10.9%	19.5%
Midwest	26.4%	24.4%
South	34.8%	34.9%
West	<u>27.8%</u>	<u>21.3%</u>
Total	100	100

Source: Knowledge Networks/SRI Home Technology Monitor Survey, Spring 2004.